

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at Page 10, lines 12-13 with the following amended paragraph:

2.1 DECOMPOSE NETWORK AND PARTITION NETWORK INTO THREE MAJOR AREAS

Please replace the paragraph at Page 11, line 17 with the following amended paragraph:

[CP] CPE Customer Premises Equipment

Please replace the paragraph at Page 14, line 4 with the following amended paragraph:

2.2 ANALYZE MAJOR AREAS AND IDENTIFY PROVISIONING REQUIREMENTS

Please replace the paragraph at Page 20, line 17 with the following amended paragraph:

3.0 AUTOMATED CPE PROVISIONING PROCESS IN GENERAL

Please replace the paragraph at Page 21, lines 12-14 with the following amended paragraph:

The following FIG. 4A is a flow diagram description of one specific embodiment of a method of provisioning CPE devices including system performs these steps to automatically accomplish a service request related to CPE provisioning.

Please replace the paragraph at Page 21, lines 15-22 with the following amended paragraph:

~~In block 402, a~~ A service request is received. For example, ~~block 402~~ this involves receiving a service request from a order service system (OSS), customer care system or other software or hardware facility of a telecommunications service provider. A service request generally specifies whether the subscriber is requesting voice service, data service, the type of data service if any, quality of service parameters, etc. In general, embodiments described herein relate to service requests for network access service, such a DSL, or other access approaches that apply to the “last mile” of connection between a subscriber premises and a switching office or other facility of the telecommunications provider.

Please replace the paragraph at Page 21, lines 23-24 with the following amended paragraph:

~~In block 404, the~~ The service request is decomposed into a sequence of procedures or steps that further break down the provisioning procedure.

Please replace the paragraph at Page 21, lines 25-26 with the following amended paragraph:

~~In block 406, the~~ The procedures or steps that configure a CPE in the NGN for the desired services are executed.

Please replace the paragraph at Page 22, lines 1-2 with the following amended paragraph:

~~In block 408, the~~ The method notifies the OSS or service provider operator of the status of provisioning.

Please replace the paragraph at Page 22, lines 3-6 with the following amended paragraph:

~~FIG. 4B is a flow diagram of steps that may be used to carry out block 406 of FIG. 4A. In this specific embodiment, As an example, configuring a CPE in the NGN is achieved by first collecting one or more configuration parameter values, based on input from the service request, and output from previous procedures/tasks, as shown by block 410.~~

Please replace the paragraph at Page 22, lines 7-8 with the following amended paragraph:

~~In block 412, a~~ A set of configuration data is generated. For example, a configuration file is created and stored, based on a template that corresponds to the device.

Please replace the paragraph at Page 22, lines 9-15 with the following amended paragraph:

~~In block 414, the~~ The configuration is delivered. The delivery mechanism that is used for a particular CPE depends on the auto-provisioning mechanism supported by that CPE. Examples of configuration delivery mechanisms that can be used include TFTP or FTP download, HTTP download from a Web server, a telnet connection that “pushes” a configuration file to the CPE device, etc. The provisioning system participates in the

delivery process by preparing and storing the configuration file for access by the CPE.

Alternatively, the provisioning system directly sends the configuration down to the CPE.

Please replace the paragraph at Page 22, lines 16-21 with the following amended paragraph:

~~In block 416, the~~ The process listens for an event or other notification from the CPE device about the status of configuration download. For example, a particular CPE device may issue an acknowledgement message if the configuration was correctly downloaded and applied. Alternatively, the CPE device may issue a warning message if an error in configuration occurred. Such messages may take the form of events that are published by the CPE device and subscribed to by the provisioning system.

Please replace the paragraph at Page 23, lines 5-6 with the following amended paragraph:

~~FIG. 5A The following is a flow diagram~~ description of a process for automating CPE provisioning based on a service request for voice and data service.

Please replace the paragraph at Page 23, lines 7-8 with the following amended paragraph:

~~In block 502, the~~ The process receives a service request for voice and data service for a DSL subscriber from the OSS.

Please replace the paragraph at Page 23, lines 9-10 with the following amended paragraph:

~~In block 504, the~~ The service request is decomposed into steps, as summarized in the table above.

Please replace the paragraph at Page 23, lines 11-12 with the following amended paragraph:

~~In block 506, the~~ The CPE device is provisioned using one or more specific provisioning steps.

Please replace the paragraph at Page 23, lines 13-14 with the following amended paragraph:

~~In block 508, the~~ The method notifies the OSS or service provider operator of the status of provisioning.

Please replace the paragraph at Page 23, lines 15-16 with the following amended paragraph:

~~FIG. 5B~~ The following is a ~~flow diagram~~ description of a process that may be used to implement the specific provisioning steps ~~of block 506.~~

Please replace the paragraph at Page 23, line 17 – Page 24, line 2 with the following amended paragraph:

~~In block 510, the~~ The process collects one or more CPE configuration parameter values from the service request that was previously received. Such parameter values may

include CPE information (e.g. location, subscriber ID, vendor, type, model, etc.),
identifiers of data and voice PVCs, username, password, etc.

Please replace the paragraph at Page 24, lines 3-5 with the following amended paragraph:

~~In block 512, the~~ The process allocates and reserves IP addresses for voice and data as required, and updates the DNS server with one or more FQDNs associated with the IP addresses.

Please replace the paragraph at Page 24, lines 6-8 with the following amended paragraph:

~~In block 514, the~~ The process generates a set of configuration data for the CPE device. In one specific embodiment, block 514 involves generating a device-specific configuration file based on a pre-defined template of configuration commands and values.

Please replace the paragraph at Page 24, lines 9-13 with the following amended paragraph:

~~In block 516, the~~ The configuration data is delivered to the CPE device. In one embodiment, the data is sent directly to the CPE device. Alternatively, a configuration file is prepared for delivery as required by the tools that participate in CPE auto provisioning. Preparation for delivery may involve storing the configuration data at a specific location, or in a specific format.

Please replace the paragraph at Page 24, lines 14-19 with the following amended paragraph:

~~In block 518, the~~ The process listens for an event or other notification from the CPE device about the status of configuration download. For example, a particular CPE device may issue an acknowledgement message if the configuration was correctly downloaded and applied. Alternatively, the CPE device may issue a warning message if an error in configuration occurred. Such messages may take the form of events that are published by the CPE device and subscribed to by the provisioning system.

Please replace the paragraph at Page 25, lines 18-24 with the following amended paragraph:

ATM networks 608A, 608B also may be communicatively coupled to a switch 616B that provides communications to a service manager complex 630 and related facilities. In this example, the service manager complex ~~530~~ 630 includes an accounting gateway 632, service manager 634, and an interface 636 to SS7 network 622. The service manager complex ~~530~~ 630 is supported by a dynamic host control protocol (DHCP) server 624 and a domain name service (DNS) server 626. Embodiments of the processes described herein may be implemented as part of service manager 634.

Please replace the paragraph at Page 32, lines 7-9 with the following amended paragraph:

As indicated by arrow 4, CPE configuration service 650 generates an initial ~~an~~ configuration file, based on a pre-defined stored template, and stores the resulting configuration file on file server 804.